

【CLAIMS】

【Claim 1】

A condensing apparatus of a dish washer for condensing vapor inside a dish washer tub, the condensing apparatus comprising:
a blower for suctioning the vapor from inside the tub; and
an air duct connected to the blower and forming a vapor passage for circulating the vapor and generating condensed water; wherein the vapor passage includes a ridge formed thereon for stopping the condensed water.

【Claim 2】

The condensing apparatus according to claim 1, wherein the vapor passage forms a meander line.

【Claim 3】

The condensing apparatus according to claim 1, wherein the vapor passage further includes a straight portion and a curved portion, and the ridge is formed at a transitional point from the straight portion to the curved portion.

【Claim 4】

The condensing apparatus according to claim 1, wherein the vapor passage includes a straight portion, and the ridge is formed on the straight portion.

【Claim 5】

The condensing apparatus according to claim 1, wherein the air duct includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor.

【Claim 6】

The condensing apparatus according to claim 5, wherein the air duct further includes a portion between the condensed water discharge port and the vapor exhaust port, the portion being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.

【Claim 7】

The condensing apparatus according to claim 1, wherein the blower includes a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the air duct, and a dryer fan for providing suctioning force to suction vapor from inside the tub.

【Claim 8】

The condensing apparatus according to claim 7, wherein the blower further includes a motor for driving the condenser fan and the dryer fan together.

【Claim 9】

A condensing apparatus of a dish washer having an air duct for suctioning and condensing vapor from inside a dish washer tub, the condensing apparatus comprising:
a vapor passage formed in the air duct for circulating the vapor suctioned from

inside the tub and generating condensed water; and a ridge formed on the vapor passage for stopping the condensed water.

【Claim 10】

The condensing apparatus according to claim 9, wherein the vapor passage forms a meander line.

【Claim 11】

The condensing apparatus according to claim 9, wherein the vapor passage includes a straight portion and a curved portion, and the ridge is formed at a transitional point from the straight portion to the curved portion.

【Claim 12】

The condensing apparatus according to claim 9, wherein the vapor passage includes a straight portion, and the ridge is formed on the straight portion of the vapor passage.

【Claim 13】

The condensing apparatus according to claim 9, wherein the air duct includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor.

【Claim 14】

The condensing apparatus according to claim 13, wherein the air duct further includes a portion between the condensed water discharge port and the vapor exhaust port, the portion being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.

【Claim 15】

The condensing apparatus according to claim 9, further comprising a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the air duct, and a dryer fan for providing suctioning force to suction vapor from inside the tub.

【Claim 16】

A condensing apparatus of a dish washer for condensing vapor inside a dish washer tub, the condensing apparatus comprising:
a dryer fan for providing suctioning force to suction vapor from inside the tub;
an air duct forming a vapor passage for circulating the suctioned vapor and generating condensed water and a ridge formed on the vapor passage for stopping the condensed water; and
a condenser fan for blowing air at the air duct to exchange heat with the vapor circulating inside the vapor passage.

【Claim 17】

The condensing apparatus according to claim 16, wherein the vapor passage forms a meander line.

【Claim 18】

The condensing apparatus according to claim 16, wherein the vapor passage has a straight portion and a curved portion, and the ridge is formed on at least one of a transitional point from the straight portion to the curved portion or a straight portion.

【Claim 19】

The condensing apparatus according to claim 16, wherein the air duct further includes a condensed water discharge port for discharging the condensed water and a split-type vapor exhaust port for exhausting de-moisturized vapor, a portion of the air duct between the condensed water discharge port and the vapor exhaust port being inclined at a predetermined angle to dispose the condensed water discharge port lower than the vapor exhaust port.

【Claim 20】

The condensing apparatus according to claim 16, wherein the condenser fan and the dryer fan are driven together by a single motor.